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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,309	06/20/2003	Keuneth Klabunde	33985	6076

23589 7590 04/15/2005
HOVEY WILLIAMS LLP
2405 GRAND BLVD., SUITE 400
KANSAS CITY, MO 64108

EXAMINER

NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/600,309	KLABUNDE ET AL	
	Examiner	Art Unit	
	Cam N. Nguyen	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 27, 2005 (an election).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed. 20-23
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to. 2, 5-7, 9, 12-14, 17-22
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 08/06/03 07/24/03
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election **without traverse** of Group I, claims 1-23, in the reply filed on January 27, 2005 is acknowledged.

2. The amendment and remarks, filed on January 27, 2005, has been considered. The nonelected claims 24-42 have been canceled.

Claims 1-23 are currently pending in the application and under examination.

Claim Objections

3. Claims 2, 5-7, 9, 12-14, & 17-22 are objected to because of the following informalities:

A. In claims 2, 9, 17, & 20, "CeO2" should be changed to --CeO₂--.

Same changes should be made to other chemical compounds in these claims.

B. In claims 5, 6, 12, 13, 19, & 22, line 2, "cm³/g" should be changed to --cm³/g--.

C. In claims 7, 14, 18, & 21, line 2, "m²/g" should be changed to --m²/g--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102(b)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Klabunde et al., "hereinafter Klabunde", (US Pat. 5,759,939).

Klabunde discloses a composite material comprising particles of a first metal oxide selected from the group consisting of MgO, CaO, Al₂O₃, SnO₂, and TiO₂, said first metal oxide being at least partially coated with a quantity of a second metal oxide different than said first metal oxide and selected from the group consisting of TiO₂, V₂O₃, Cr₂O₃, Mn₂O₃, Fe₂O₃, Cu₂O, CoO and mixtures thereof, said composite having a surface area of at least about 15 m²/g and an average particle size of up to about 21 nm (see col. 11, claim 1). See also col. 12, claim 7, which discloses that the composite having a surface area of from about 250-600 m²/g.

Regarding claims 1-4, 8-11, & 16-18, Klabunde discloses the claimed composition, thus anticipates the claims.

Regarding claims 5-7, 12-15, & 19, it is considered the claimed limitations, e.g., pore volume, average pore opening size, surface area of the first material, etc., are inherently taught by the teaching of the reference in view of the same first material and second material disclosed. It is also inherent that the same composite material possesses the same characteristics unless there is a structural difference shown or being claimed in the claim itself, otherwise.

Allowable Subject Matter

6. Claims 20-23 are allowed because the prior art does not disclose or fairly suggest a composite comprising a plurality of agglomerated nanocrystalline particles selected from the group consisting of Ga_2O_3 , In_2O_3 , and mixtures thereof, said composite retaining at least about 25% of the total pore volume of said particles prior to agglomeration thereof.

Citations

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form attached. All references are cited for related art.

Conclusion

8. Claims 1-23 are pending. Claims 1-19 are rejected. Claims 2, 5-7, 9, 12-14, & 17-22 are objected. Claims 20-23 are allowed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 8:45 AM - 5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn *cnn*
April 4, 2005

Cam Nguyen
CAM N. NGUYEN
PRIMARY EXAMINER
AV-1754